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Indian Standard
GRADING FOR
SOYBEANS FOR OIL MILLING

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Indian Standard

GRADING FOR SOYBEANS FOR OIL MILLING

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Indian Standard

GRADING FOR SOYBEANS FOR OIL MILLING

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 25 September 1975, after the draft finalized by the Oils and Oilseeds Sectional Committee had been approved by the Chemical Division Council and the Agricultural and Food Products Division Council.

0.2 In view of the shortage of edible oils and fats in the country a number of steps have been taken to augment their supply and the cultivation of soybeans is one such step. Now that soybeans are commercially available in the country for oil milling industry, the concerned Sectional Committee decided to formulate this standard in order to meet the need for precise and acceptable requirements and methods for grading of soybeans.

0.3 The oil obtained from soybeans is covered under IS:4276-1967* which is also under revision and would include raw oil as well as refined oil based on data available on indigenous samples of the material.

0.4 This standard has been based on data received from district authorities of several regions in the country where soybeans are cultivated and compiled by the Ministry of Agriculture, Government of India. The assistance so derived is thankfully acknowledged.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS:2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes methods of grading and requirements for soybeans for oil milling, along with methods of sampling and test.

*Specification for solvent-extracted soybean oil, refined.

†Rules for rounding off numerical values (*revised*).

2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given under 2 of IS: 3579-1966* shall apply.

3. GRADES

3.1 The material shall be of two grades, namely, Grade 1 and Grade 2.

4. REQUIREMENTS

4.1 The material shall be obtained from the plant *Glycine Max* (L) Merrill Syn. *Glycine Soja* Sieb & Zucc., fam. Leguminosæ.

4.2 The material shall be clean. The seeds shall not emit foul odour, nor found deformed due to moist conditions.

4.3 The material shall be free from non-edible seeds, such as *MAHUA* castor, *NEEM* and argemone.

4.4 The material shall also comply with requirements given in Table 1.

TABLE 1 REQUIREMENTS FOR SOYBEANS FOR OIL MILLING

Sl. No.	CHARACTERISTIC	REQUIREMENT FOR		METHOD OF TEST, (REF TO CL No. IN IS : 3579-1966*)
		Grade 1	Grade 2	
(1)	(2)	(3)	(4)	(5)
i)	Damaged and weevilled seeds, percent by mass, <i>Max</i>	2	5	4
ii)	Shrivelled and immature seeds, percent by mass, <i>Max</i>	3	8	
iii)	Impurities, percent by mass, <i>Max</i>	2	3	
iv)	Total of (i), (ii) and (iii), <i>Max</i>	5	10	—
v)	Split or cracked seeds, percent by mass, <i>Max</i>	10	20	4
vi)	Moisture content, percent by mass, <i>Max</i>	12	14	5.1
vii)	Oil content, percent by mass, <i>Min</i>	20	17	5.2
viii)	Acid value of extracted oil, <i>Max</i>	4	6	5.3

*Methods of test for oilseeds.

*Methods of test for oilseeds.

5. PACKING

5.1 The material shall be supplied packed in clean, dry, sound, single, new or unremended hessian bags in merchantable condition, as agreed to between the purchaser and the supplier.

6. MARKING

6.1 The bags shall be marked with the following particulars:

- a) Name and grade of the material,
- b) Net mass,
- c) Year of the crop, and
- d) The source of supply.

7. SAMPLING

7.1 Representative samples of the material shall be drawn as prescribed in IS:4115-1967*.

8. TESTS

8.1 Tests shall be carried out as prescribed in IS:3579-1966†. Reference to the relevant clauses of this standard is given in col 5 of Table 1.

8.2 Quality of Reagents— Unless specified otherwise, pure chemicals and distilled water (see IS:1070-1960‡) shall be used in the tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

*Methods for sampling of oilseeds.

†Methods of test for oilseeds.

‡Specification for water, distilled quality (revised).

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Panel for Drafting Specifications for Oilseeds, CAFDC 5 : 5 : 1

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